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**Online fundraising – the perfect ask?**

Abigail Payne, Kimberley Scharf  
and Sarah Smith

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## **Online fundraising – the perfect ask?<sup>1</sup>**

Abigail Payne (McMaster University)

Kimberley Scharf (Warwick University)

Sarah Smith (University of Bristol)

Online platforms provide an opportunity for individuals to fundraise for their favourite charities and charitable causes. In recent years, individual charity fundraising through these platforms has become a mass activity. Using JustGiving, the UK's biggest charity fundraising platform, 21 million people have raised £1.5 billion for over 13,000 charities and causes since the website was set up in 2001.<sup>2</sup>

Recent figures suggest that online donations are still a relatively small part of overall giving; an estimated 7% of the total dollar amount given in the US<sup>3</sup> and used by 7% of UK donors.<sup>4</sup> But online and text giving are growing at a faster rate than total donations, indicating that this share will grow.

In this paper, we present insights on individual fundraising from micro-econometric analysis of JustGiving data. The analysis exploits a number of different data sub-samples. The largest comprises 416,313 fundraisers who were active JustGiving users at the time of an online survey that ran from October 2010 – April 2011. We also analyse data on 10,597 fundraisers who ran in the 2010 London marathon and from a sample of 39,238 fundraisers who had linked their fundraising pages to their Facebook page. Details on all these samples are given in the Appendix.

The focus of the analysis is what determines fundraising success. The “perfect ask” in the title of the paper suggests that there may be a winning formula that could easily be replicated. In practice, much of the power of individual fundraising comes from its very personal – and

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<sup>1</sup> This paper draws on a number of separate analyses of JustGiving data. Thanks are due to staff at JustGiving, especially to Liz Kessick and Mike Bugembe, for helping to make the data available. We also thank Olesya Kolyachkov and Edmund Wright for excellent research assistance.

<sup>2</sup> Source: JustGiving.

<sup>3</sup> Source: <https://www.blackbaud.com/files/resources/downloads/2012.CharitableGivingReport.pdf>.

<sup>4</sup> Source: <https://www.cafonline.org/PDF/UKGiving2012Full.pdf>.

idiosyncratic – nature, but there may nevertheless be some useful lessons to be learned from studying how fundraisers and donors behave.

A “typical” fundraising page (the median) has 14 donations and raises £245. But, as shown in Table 1, there is substantial variation in the number of donations and the amounts raised. The top 10% of pages raise £1,343 or more; the bottom 10% manage less than £38. In this paper, we show that at least some of this variation can be linked to specific factors having to do with the individual’s fundraising strategy (for example, the type of event they do and whether or not they set a fundraising target). We also show that social interactions are crucially important – whether between the fundraiser and donors or between donors. Individual fundraising is a uniquely personal and interactive form of fundraising, introducing new social dynamics into fundraising.

**Table 1: Summary statistics on JustGiving fundraising pages**

|  | Mean   | 10 <sup>th</sup><br>percentile | Median | 90 <sup>th</sup><br>percentile |
|--|--------|--------------------------------|--------|--------------------------------|
| <u>At the page-level</u>                   |        |                                |        |                                |
| Number of donations                        | 21     | 3                              | 14     | 46                             |
| Average donation amount                    | 23.97  | 9.09                           | 17.50  | 40.35                          |
| Total amount raised                        | 565.86 | 38.00                          | 245.00 | 1,343.22                       |
| <u>At the donation-level</u>               |        |                                |        |                                |
| Amounts donated                            | 26.92  | 5                              | 20     | 50                             |
| Sample: 416,313 fundraisers; 546,821 pages |        |                                |        |                                |

### ***Why fundraise?***

Table 2 summarizes self-reported motivations for individual fundraising. The main motivation for fundraisers is to help charities, either by raising money and/or by increasing awareness. Taking part in the event is less of a factor for most people, although it is very important for around one-quarter of fundraisers. In most cases, the initiative for fundraising comes from the individuals themselves. Being asked by someone else (a friend, people at work, a charity) has been shown to play an important role in explaining why people volunteer,<sup>5</sup> but appears to be much less important in explaining why people fundraise.

<sup>5</sup> Freeman, R. (1997) “Working for nothing: The supply of volunteer labor”, Journal of Labor Economics

**Table 2: Individual motivations for fundraising***Generally how important to you were each of the following factors in deciding to fundraise?*

|  | Very Important | Somewhat Important | Not Very Important | Not at all Important |
|--|----------------|--------------------|--------------------|----------------------|
| I wanted to raise as much money for charity as possible  | 50.4%          | 41.4%              | 7.2%               | 1.0%                 |
| I wanted to raise awareness of a particular charity or cause   | 40.2%          | 40.8%              | 13.1%              | 5.9%                 |
| I wanted to do more for charity than just give my own money  | 37.9%          | 47.9%              | 12.1%              | 2.2%                 |
| I wanted to raise money for a cause that was related to a personal event or tragedy that affected me or someone I know                         | 35.0%          | 27.5%              | 17.6%              | 20.0%                |
| I wanted to raise money in memory of someone   | 23.4%          | 23.6%              | 24.0%              | 29.0%                |
| I wanted to participate in an event that required me to fundraise for charity  | 25.6%          | 33.0%              | 23.2%              | 18.2%                |
| I wanted to do a particular activity, and though it would be nice to raise some money in the process   | 24.2%          | 35.5%              | 20.9%              | 19.3%                |
| I wanted to set a good example so others would see the importance of fundraising   | 10.7%          | 32.8%              | 24.9%              | 31.5%                |
| My fundraising page was a part of a group of pages done with my friends/colleagues/family members  | 8.5%           | 18.7%              | 20.7%              | 52.1%                |
| I was asked to host a fundraising page for a particular charity  | 4.6%           | 11.1%              | 25.5%              | 58.9%                |
| I was asked to host a fundraising page by my work/corporate responsibility scheme  | 2.8%           | 7.7%               | 23.2%              | 66.4%                |
| Source: Online survey of JustGiving donors, fundraisers and sponsors carried out Oct 2010 – Apr 2011.<br>Sample size for this question: 13,784 |                |                    |                    |                      |

For charities, individual fundraising can have a number of advantages over other fundraising methods.

First, it can be highly cost-effective compared to alternatives such as professional face-to-face fundraising (estimated breakeven point, 26-28 months of donations<sup>6</sup>). Mass participation events can be costly if they are organised by the charity (such as Race for Life) or if the charity has to pay for fundraising places in externally-organised events (such as the London marathon). But, as we show below, many fundraising events are ones where individuals have

<sup>6</sup> Source: [http://www.pfra.org.uk/face-to-face\\_fundraising/do\\_you\\_object\\_to\\_chuggers/money\\_doesnt\\_go\\_to\\_charity/](http://www.pfra.org.uk/face-to-face_fundraising/do_you_object_to_chuggers/money_doesnt_go_to_charity/).

taken the initiative and have devised and organised the event themselves at relatively little or no cost to the charity.

Second, individuals can be highly effective fundraisers. The fact that an individual takes the time and effort to fundraise on behalf of a charity provides it with a personal endorsement (“I care enough about this charity...”). This might not matter for a big charity with a well-known brand, but could potentially be important for smaller – and less well-known – charities. The economics literature on charitable giving takes very seriously the importance of signals as verifiers of the quality of a charity.<sup>7</sup> Such signals – often in the form of large, leading donations – have been shown to increase subsequent giving. In a world where there are literally hundreds of thousands of charities competing for attention and money, signals in the form of (costly) individual fundraising effort can be very valuable.

Analysing data from the sample of Facebook-linked fundraisers reveals that individuals fundraising for smaller charities (annual incomes < £100K) tend to raise more money than individuals fundraising for larger charities. The numbers summarized in Table 3 show the number of donations (per fundraising page), the donation amounts and the total raised (per fundraising pages) by charity size. In each case, they show the effect of fundraising for a larger charity relative to fundraising for a smaller charity.

**Table 3: Size of charity**

|   | Number of donations | Donation amounts | Total amount raised |
|---|---------------------|------------------|---------------------|
| Relative to <£100K:   |                     |                  |                     |
| £100K – £500K   | -15%                | -6%              | -22%                |
| £500K - £5million   | -16%                | -6%              | -23%                |
| £5million +   | -24%                | -6%              | -31%                |
| Sample details: 39,238 fundraising pages linked to a Facebook page. Analysis additionally controls for age, income, fundraising target and type of event. |                     |                  |                     |

<sup>7</sup> Vesterlund, L. (2003) “The Informational Value of Sequential Fundraising.” *Journal of Public Economics*, 87 pp 627 – 58.

## The power of the personal

Also important is the personal nature of “the ask” in individual fundraising. As shown in Table 4, most people who give to individual fundraising pages are likely to be part of the fundraiser’s existing social network of friends, family and colleagues. Not only are sponsorship requests more likely to come from within the immediate social network of family members, friends and work colleagues (rather than more distant relations such as friends of friends), but these requests are also more likely to be met with a positive response.

**Table 4: Responses to sponsorship requests**

*Which of the following types of acquaintances have asked you to sponsor them and have you given when asked?*

|  | Always gave when asked | Sometimes gave when asked | Never gave when asked | Never asked |
|--|------------------------|---------------------------|-----------------------|-------------|
| Family member  | 72.6%                  | 11.0%                     | 0.5%                  | 16.0%       |
| Friend   | 64.0%                  | 32.2%                     | 0.3%                  | 3.5%        |
| Colleague  | 42.5%                  | 45.4%                     | 1.2%                  | 11.0%       |
| Son/Daughter of someone I know   | 25.1%                  | 23.6%                     | 3.3%                  | 48.1%       |
| Neighbour  | 22.3%                  | 21.4%                     | 1.7%                  | 54.6%       |
| Friend of someone I know   | 10.6%                  | 37.0%                     | 7.3%                  | 45.2%       |
| Parent of a friend/school mate of my child   | 10.4%                  | 20.3%                     | 5.4%                  | 63.9%       |
| Charity representative   | 5.9%                   | 45.9%                     | 17.2%                 | 31.1%       |
| Source: Online survey of JustGiving donors, fundraisers and sponsors carried out Oct 2010 – Apr 2011.<br>Sample size for this question: 18,163 |                        |                           |                       |             |

The importance of personal relationships mirrors previous findings in the empirical economics literature. For example, Meer (2011)<sup>8</sup> shows that a personal ask is much more effective in alumni fundraising; he compares cases where alumni raising money for their university ask people they roomed with in college compared to asking people they didn’t know. The attraction of individual fundraising for charities is that fundraisers are able to exploit their personal relationships with family, friends and colleagues to raise money.

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<sup>8</sup> Meer, J. (2011), “Brother, Can You Spare a Dime: Peer Pressure in Charitable Solicitation,” *Journal of Public Economics* **95**: 926-941.

The role of personal relationships between fundraisers and donors has received relatively little attention in (theoretical) economic models of charitable giving. A standard approach to modelling motivations for giving is to assume that donors care directly about the good cause, i.e. the goods and services that are being provided by the charities.<sup>9</sup> Another approach is to assume that they care about how giving makes them feel, i.e. a “warm glow” they get from their contribution.<sup>10</sup> In the context of individual fundraising, however, donors may also care directly about the fundraiser and about how much the fundraiser raises. We call this a *relational warm glow* because it comes directly from the relationship between the fundraiser and the donor.<sup>11</sup>

**Table 5: Factors that determine how much people give (self-reported)**

|   | Very important | Somewhat important | Not very important | Not at all important | Not applicable |
|---|----------------|--------------------|--------------------|----------------------|----------------|
| A sense that my money will be used efficiently/ effectively   | 56.1%          | 35.0%              | 6.9%               | 1.6%                 | 0.6%           |
| The charity's cause or mission  | 45.1%          | 44.1%              | 8.4%               | 1.9%                 | 0.6%           |
| My income and what I can afford   | 45.3%          | 42.3%              | 9.0%               | 2.5%                 | 0.8%           |
| A personal connection to the fundraiser   | 41.5%          | 43.4%              | 10.6%              | 3.5%                 | 1.1%           |
| The fundraiser's reason for fundraising   | 38.0%          | 48.0%              | 10.1%              | 3.0%                 | 1.0%           |
| The reputation of the charity   | 32.7%          | 47.5%              | 15.3%              | 3.4%                 | 1.0%           |
| Tax relief (e.g. Gift Aid)  | 21.7%          | 34.8%              | 23.5%              | 14.3%                | 5.8%           |
| Type of fundraising event   | 14.4%          | 45.8%              | 29.8%              | 8.6%                 | 1.5%           |
| The name of the charity   | 14.1%          | 39.4%              | 32.5%              | 12.1%                | 1.9%           |
| The total amount the fundraiser is seeking to raise   | 3.3%           | 28.0%              | 38.9%              | 24.9%                | 5.1%           |
| How much other people have given to the fundraiser  | 2.7%           | 21.6%              | 39.0%              | 33.1%                | 3.7%           |
| An individual amount suggested by the fundraiser  | 1.4%           | 15.9%              | 39.6%              | 29.9%                | 13.2%          |
| Source: Online survey of JustGiving donors, fundraisers and sponsors carried out Oct 2010 – Apr 2011. Sample size for this question: 17,989 |                |                    |                    |                      |                |

<sup>9</sup> Bergstrom, T., Blume, L. & Varian, H. (1986), “On the Private Provision of Public Goods,” *Journal of Public Economics* 29: 25-49.

<sup>10</sup> Andreoni, J. (1990) “Impure altruism and donations to public goods: a theory of warm-glow giving” *Economic Journal* 464-477

<sup>11</sup> Scharf, K. and Smith, S. (2014) “Relational Warm Glow: Giving in Social Groups” CMPO Working Paper <http://www.bristol.ac.uk/cmpo/publications/papers/>



Table 5 provides information on the relative importance of different factors in determining how much people give in the context of individual fundraising. The first two factors reflect standard motivations for giving – individual donations are affected by a sense that the money will be used efficiently and effectively and by the charity’s cause or mission. However, the relational warm glow also matters – the fourth most important factor on the list is the donor’s personal relationship to the fundraiser. This comes above tax relief, which is typically thought to be an important incentive to encourage donations.

Of course, it is important to bear in mind that these are self-reported factors – what donors *perceive* as being important in determining how much they give – which might be different from what is actually important in determining how much they give. For example, near the bottom of the list of factors are the event, how much other people give and fundraising targets – we show below that all of these have significant and sizeable effects on how much is given.

### ***Individual fundraising strategies***

Individual fundraisers have to make a number of choices. Big decisions include how to raise money (run a marathon, grow a moustache, stay dry for a month, ask people to make contributions for an anniversary) and what charity to support (a specific cause, a big national charity, a small local organisation). In many cases, these two choices are linked. Charities organise “mass participation events” (Race for Life, The Big Coffee Morning, Movember) where many people come together to raise money for one particular charity by doing the same activity. Other fundraising takes place at externally-organised events, typically sporting events such as triathlons and marathons, at which there may be a number of charities that have paid for fundraising places. Looking across our largest sample of 416,313 JustGiving fundraisers (who have between them more than 500,000 pages), we estimate that 38% of fundraising pages are for charity-organised mass events (such as the Race for Life), while 45% are for other-organised mass events (such as the London Marathon). The remaining 17% are lone fundraisers, who do not appear to be fundraising with other people as part of a mass event, but have chosen their own individual event and charity.

We show in Table 6 that the numbers of donations and the amounts raised are strikingly different across lone fundraisers and mass event fundraisers. Lone fundraisers tend to attract more donations than people taking part in mass events and they tend to raise more money. This suggests that there may be important distinctions in fundraising behaviour across the two.

- One possibility is that some fundraisers engaged in mass events may be attracted by the activity as well as, or even instead of, the particular cause. As shown in Table 2, the activity is a very important motivating factor for around one-quarter of fundraisers. Lone fundraisers, by contrast, may be more likely to be motivated by the desire to raise money for a particular charity or cause. If they have a higher level of commitment to the charity/ cause then this may be one reason for why they tend to raise more than mass fundraisers.
- Another difference, however, is that mass event fundraisers may find themselves competing for donations – they are not the only ones fundraising for a particular charity at a particular time. This competition could be particularly intense in the case of local events which attract people from the same social networks (a local Race for Life for example). On the other hand, the publicity surrounding the mass event may help to increase awareness of the cause and encourage a greater response from donors. Lone fundraisers do not have to compete with other fundraisers doing the same activity for the same charity at the same time, but they need to do all their own promotion as there isn't the same level of publicity attached to their event.
- More generally, lone fundraisers may find it more costly in terms of time and effort to organise a fundraising activity – they can't simply turn up on the day. And, while it may be personally rewarding to raise money for their preferred charity or cause, they may miss out on some of the fun of taking part in an event alongside thousands of other fundraisers. This may affect how they feel about fundraising and also whether they choose to repeat the experience. Although lone fundraisers tend to raise more money, they are less likely to fundraise again within the next 12 months.

**Table 6: Lone fundraising versus mass event fundraising**

|                              | % sample<br>(FRs) | Number of<br>donations<br>per<br>fundraiser | Total<br>amount<br>raised per<br>fundraiser | % FRs who<br>fundraise<br>again |
|------------------------------|-------------------|---|---|---------------------------------|
| Individual-led               | 17.1%             | 25  | £853  | 15.0%                           |
| Mass event                   | 44.8%             | 22  | £588  | 19.0%                           |
| Charity-organised mass event | 38.1%             | 16  | £439  | 19.5%                           |

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Analysis based on 546,637 fundraising pages

Individual-led: individual is the sole FR in a unique event

Mass event: many fundraisers, many possible charities (London marathon)

Charity mass event: many fundraisers, one charity (Race for Life)

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### ***Target setting***

Another choice for fundraisers is whether or not to set a target – and how much to aim for. Targets can play a number of roles. They can provide motivation to the fundraiser to engage in fundraising; they can act as a co-ordinating device, encouraging donors to make a contribution, at least up to the threshold of the target<sup>12</sup> and they can provide donors with guidance on how much to give.

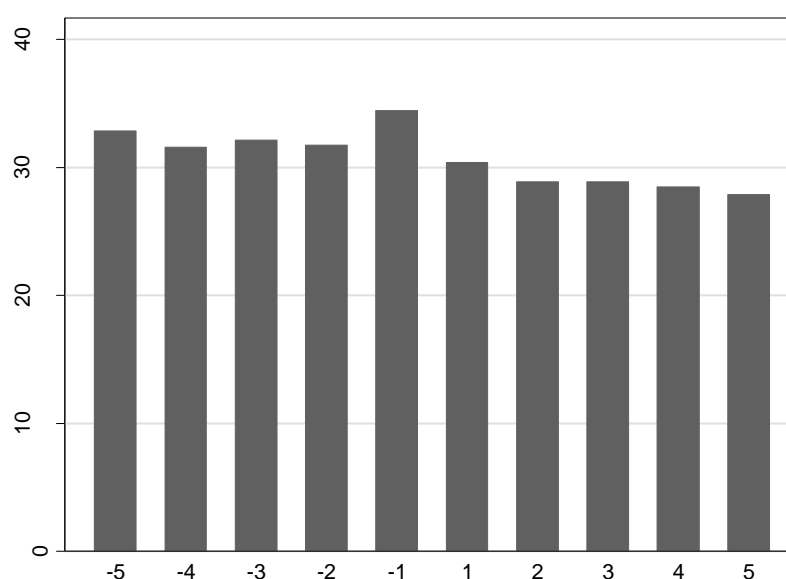
In practice, most fundraising pages (80%) have a target. The typical (median) target amount is £350, but there is a wide range around this. Some targets appear to be unrealistic – from a few pennies to one billion pounds. The 10<sup>th</sup> percentile is £100 and the 90<sup>th</sup> percentile is £2,000.<sup>13</sup> Donors' perceptions are that targets and suggestions from fundraisers on how much to give are not important factors in determining how much they give (Table 5), but the data show significant differences in donations across pages with and without a target. Pages with a target raise significantly more than pages without (+ £122). It is not clear whether this difference is because people who want to raise more money set targets (and devote more effort to fundraising) or because targets have a positive effect on how much people give.

<sup>12</sup> Andreoni, J. (1998) "Toward a theory of charitable fundraising" *Journal of Political Economy*, **106** (6) pp 1186–213. . In practice, the targets set by fundraisers tend not to be binding in that the money is given even if the target is not met. Also, the money typically flows into the charities' general funds rather than being used to fund specific projects. Nevertheless, targets may still be effective if donors perceive that they are binding.

<sup>13</sup> Analysis based on our largest sample of 416,313 JustGiving fundraisers.

**Figure 1: Behaviour around the fundraising target**

*Donations made before/after the fundraising target has been met*



Notes to figure:

Analysis based on sample of 10,597 fundraisers who ran in the 2010 London Marathon. On the x-axis: negative numbers donate the donations *before* the target has been met. positive numbers donate the donations *after*.

However, looking at what happens around the target amount points to some interesting behavioural effects. Figure 1 plots the average amount donated before and after the target has been reached. These averages are calculated across all pages which have a target that has been met. Negative numbers along the x-axis represent donations made before the target has been met; positive numbers denote donations made after the target has been met (so “1” is the first donation that a donor makes after the target has been met). The figure clearly illustrates that donors give less once the target has been reached (an average of £2 - £3 less). This suggests one possible strategy is for donors to set – and raise – successive targets to maintain levels of donations.

### ***Social interactions – fundraisers and donors***

As we have already seen, most donations to a fundraising page come from the fundraiser’s existing social group – their network of friends, family and work colleagues. The size of these pre-existing social groups will vary across fundraisers – some fundraisers have extensive networks, others have a much smaller social group. The extent of this variation is clear from

looking at the number of Facebook friends that fundraisers have – arguably a plausible indicator of a relevant social network. The median number of Facebook friends is 250, but the 10<sup>th</sup> percentile is 82 and the 90<sup>th</sup> percentile is 701. An obvious question is whether these differences in social group size translate into variation in fundraising success – do people with large networks and more friends tend to raise more money?<sup>14</sup>

**Table 7: Variation in fundraising, by fundraiser and donor characteristics**

|  | Proportion<br>of sample | Number of<br>donations | Total<br>amount<br>raised (£) | Mean<br>donation<br>(£) | Number of<br>friends |
|--|-------------------------|------------------------|-------------------------------|-------------------------|----------------------|
| Male fundraiser  | 0.473                   | 16.2                   | 328.6                         | 18.3                    | 342.6                |
| Female fundraiser  | 0.526                   | 13.0                   | 246.4                         | 16.9                    | 315.2                |
| <u>FR Age</u>  |                         |                        |                               |                         |                      |
| 18-25  | 0.149                   | 13.1                   | 231.6                         | 15.6                    | 481.5                |
| 26-30  | 0.172                   | 14.4                   | 265.5                         | 16.7                    | 361.6                |
| 31-35  | 0.149                   | 15.6                   | 300.0                         | 17.6                    | 311.8                |
| 36-40  | 0.166                   | 15.0                   | 303.0                         | 18.1                    | 266.3                |
| 41-45  | 0.137                   | 14.6                   | 304.9                         | 18.7                    | 273.5                |
| 46-50  | 0.094                   | 14.5                   | 312.0                         | 19.0                    | 297.0                |
| 51-55  | 0.050                   | 14.4                   | 313.5                         | 19.2                    | 276.2                |
| 56-60  | 0.028                   | 14.6                   | 301.7                         | 18.7                    | 255.5                |
| 61-65  | 0.018                   | 13.4                   | 289.2                         | 19.4                    | 304.7                |
| 66-70  | 0.012                   | 13.6                   | 282.5                         | 17.8                    | 314.8                |
| 71-75  | 0.007                   | 13.2                   | 261.1                         | 17.5                    | 317.8                |
| 76+  | 0.018                   | 15.5                   | 296.9                         | 17.1                    | 335.0                |
| <u>FR Hhold income</u>   |                         |                        |                               |                         |                      |
| <£10K  | 0.071                   | 12.3                   | 215.5                         | 15.7                    | 372.4                |
| £10K-£15K  | 0.036                   | 12.1                   | 213.6                         | 15.9                    | 403.2                |
| £15K-£20K  | 0.151                   | 13.0                   | 235.4                         | 16.0                    | 367.0                |
| £20K-£25K  | 0.178                   | 13.2                   | 247.6                         | 16.7                    | 333.3                |
| £25K-£30K  | 0.164                   | 14.1                   | 267.4                         | 17.0                    | 315.8                |
| £30K-£40K  | 0.120                   | 15.3                   | 299.9                         | 17.5                    | 302.2                |
| £40K-£50K  | 0.078                   | 15.4                   | 305.8                         | 18.0                    | 300.2                |
| £50K-£60K  | 0.120                   | 16.7                   | 358.0                         | 19.3                    | 295.3                |
| £60K-£75K  | 0.064                   | 18.2                   | 436.3                         | 21.6                    | 313.9                |
| £75K+  | 0.016                   | 21.1                   | 526.8                         | 23.2                    | 316.9                |
| <u>Donor gender</u>  |                         |                        |                               |                         |                      |
| Male   | 0.311                   |                        |                               | 20.0                    |                      |
| Female   | 0.393                   |                        |                               | 15.3                    |                      |
| Anonymous  | 0.073                   |                        |                               | 12.8                    |                      |
| Unknown  | 0.222                   |                        |                               | 20.5                    |                      |
| Sample details: 39,238 fundraising pages linked to a Facebook page |                         |                        |                               |                         |                      |

<sup>14</sup> Scharf (2014) “Private Provision of Public Goods and Information Diffusion in Social Groups,” Forthcoming *International Economic Review*.

Of course, social group size may be correlated with other characteristics of the fundraisers (and donors). Young people tend to have more Facebook friends than older people; they also tend to give less. Without controlling for age, we would get a spurious correlation between social group size and size of donations. Table 7 illustrates the variation in fundraising behaviour and number of Facebook friends. The demographic information comes from JustGiving and is based on a household-specific market research classification. In our analysis of the effect of social group size on fundraising behaviour, we control for fundraiser gender, age, income,<sup>15</sup> event type and donor gender.

The raw relationships between social group size and donations to the fundraising page are shown in Figure 2. The three graphs show number of donations to a page, average amount given and total amount raised. Social group size – captured by the number of Facebook friends of the fundraiser – is shown along the horizontal axis. These figures illustrate the key correlations which remain significant when we control for fundraiser characteristics.<sup>16</sup>

The main message is that the size of the fundraiser's social group makes a difference, both to the number of donations received and to the average donation size:

- People with larger social groups receive more donations. The effect size is not large – someone with 250 versus 100 Facebook friends receives one more donation on average (including a full set of controls) – but it is statistically significant.
- The average size of donations is smaller in larger social groups. Comparing someone with 250 versus 100 Facebook friends, each donation is £3.00 smaller (including a full set of controls). This is not simply the result of the “marginal donation” being smaller and bringing down the average. In larger groups, we find that the very first donation to a page is smaller; we also find that the maximum donation to a page is smaller. Taken together, we find this to be very strong evidence that donors who are part of larger social groups give less.
- Our final outcome is the total amount raised. We find no significant relationship with social group size, suggesting that the effect on the number of donations and the effect on

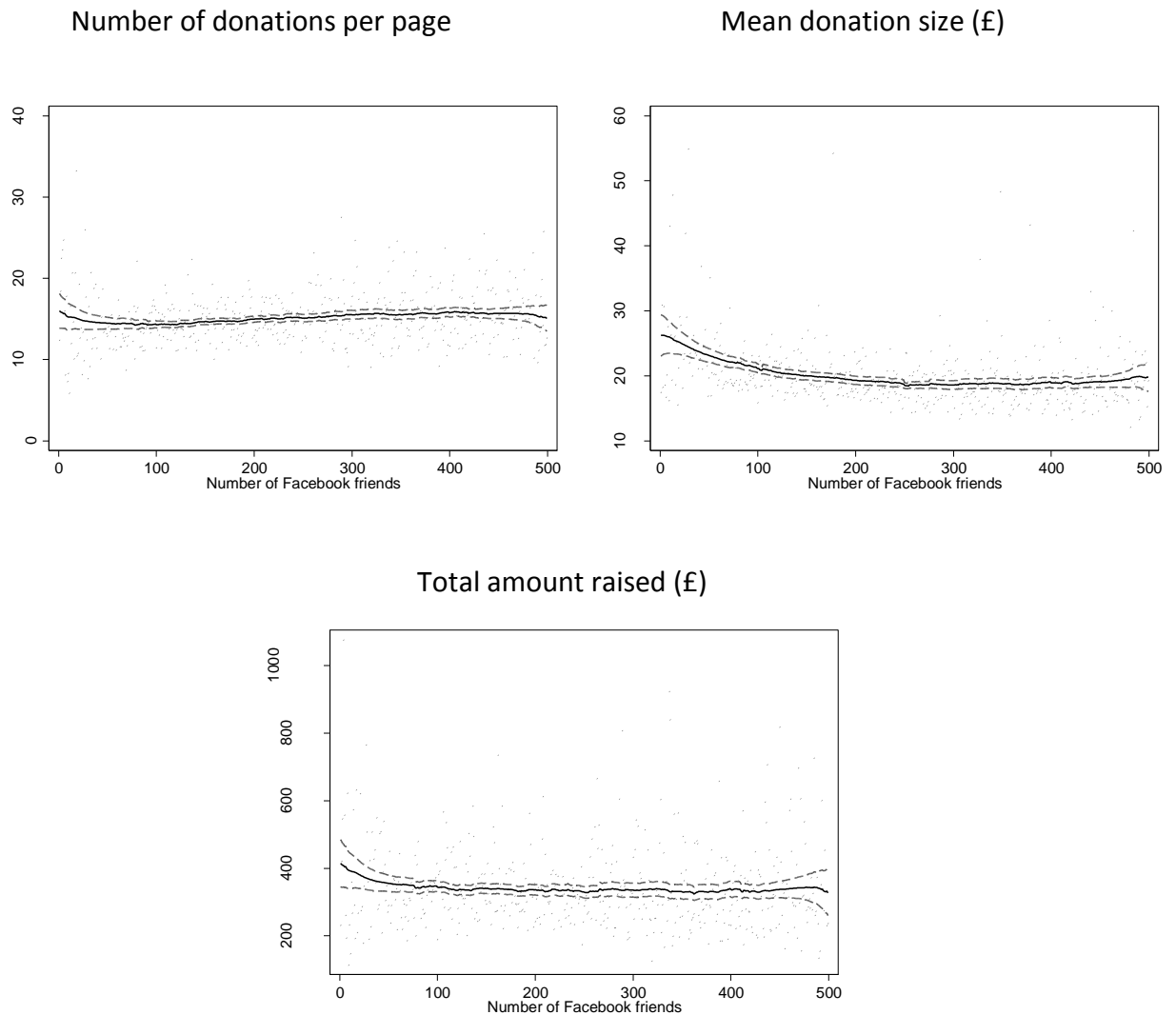
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<sup>15</sup> Ideally we would want to control for donor characteristics but we have information only on fundraiser characteristics. However, under the assumption of network homophily (that people in social groups share characteristics) it is reasonable to assume that the fundraiser characteristics are a proxy for donor characteristics.

<sup>16</sup> Full regressions available in Scharf and Smith (2014).

donation size roughly cancel out. We also show that this relationship holds for pages both with and without targets. Target-setting is more likely in larger social groups, which is a reasonable response if fundraisers anticipate smaller donations, but social group size has a negative effect on the probability that the target is met and the proportion of the target that is reached.

**Figure 2: Relationship between social group size and donations**



Note to figure: The graphs plot the means of the total number of donations per page, donation size and total amount raised per page, by number of Facebook friends (shown by the scatter points), together with smoothed running lines and confidence intervals.

To what extent can we treat group size as exogenous and so interpret these as causal relationships? The number of Facebook friends is measured at the start of the fundraising campaign size, meaning that it will not be affected by individual fundraising activity. Our results are robust to controlling for key fundraiser characteristics (gender, age, income). It is

possible that there are other characteristics of the fundraiser or the members of their social group that we cannot control for and that may be correlated with both the number of Facebook friends (social group size) and how much is donated. The psychology literature suggests a number of potential factors that affect social group size, including popularity, narcissism and brain size, but none of these can plausibly explain the strong negative relationship between group size and contributions. We therefore interpret our findings as saying something meaningful about the effect of group size on donations to the fundraising page.

At first sight, the fact that people in larger social groups give less seems like a classic public good free-riding result: When there are more people to give to a charity, each person can get away with giving a bit less. But this does not bear up to closer scrutiny. Many of the fundraising pages are for large, national charities such as Cancer Research UK. For this charity, the donation of any single individual to an individual fundraising page is a drop in the ocean whether there are 80 or 800 potential donors in a fundraiser's social network.

The free-riding argument only makes sense if donors care about the total amount raised for the charity on the particular fundraising page, not (just) about how much the charity gets in total. If people in the fundraiser's social network care about the fundraiser and how much the fundraiser raises, then, in larger social groups, each donor will give a little less. But, note that this is a new take on the public good free-riding argument; it assumes that donors care not just about the charity, but also about the fundraiser and it brings the relationship between donors and the fundraiser (the relational warm glow) into explanations of donor behaviour.

There are other possible candidate explanations for why people give less in larger social groups – in larger groups, the strength of the social ties between the fundraiser and the donors may be weaker; the fundraiser can also devote less time and effort to fundraising from each member of their social group. But again, these are arguments about the relationships between the donors and the fundraiser, relationships which are at the heart of individual fundraising.

### ***Social interactions – peer pressure***

Fundraising platforms such as JustGiving provide a public setting for donations where donors can see how much others have given and know that their donations will be seen by others.



This environment powerfully shapes giving behaviour. Donations made in public have been shown to be different to – and larger than – donations made in private<sup>17</sup> and social information on donations (i.e. information on how much other people have given) also affects whether and how much people give.<sup>18</sup>

JustGiving donors report that how much other people have given is a relatively unimportant factor in determining how much they give (Table 5). In practice, it turns out to be a key driver of donor behaviour.<sup>19</sup>

There are a number of possible ways in which donors may be influenced by how much other people have given.

- Donors may be affected by “shining knights”, i.e. by large donations to a page. The idea of competitive altruism<sup>20</sup> suggests that people compete to be the most generous where it is advantageous to do so (eg because it sends a message about their wealth or their generosity).
- They may also be affected by “widows’ mites”, i.e. by small donations to a page, if they want to avoid the social stigma of being the meanest on the page.
- There may be “herd behaviour” as donors with a desire to conform try to target the modal amount.
- There may also be benchmarking as donors use the information on the donations already made to gauge how much they should give.

Analysis of giving patterns on JustGiving suggests that all of these behaviours are relevant. To illustrate this, Figure 3 shows levels of giving before and after a large donation to a fundraising page (defined as one that is more than twice page mean and at least £50), before and after a small donation (defined as less than half page mean) and before and after a change in the modal donation. As in Figure 1, each bar represents the average donation size (averaged

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<sup>17</sup> Soetevent, A. (2005) “[Anonymity in Giving in a Natural Context – A Field Experiment in 30 Churches](#),” *Journal of Public Economics*, 89(11-12), December, 2301-2323; Alpizar, F., Carlsson, F. and Johansson-Stenman, O. (2008) “Anonymity, reciprocity, and conformity: Evidence from voluntary contributions to a national park in Costa Rica” *Journal of Public Economics*, 92 (5–6) pp 1047–1060

<sup>18</sup> Shang, J. and Croson, R. (2009) “Field experiments in charitable contribution: The impact of social influence on the voluntary provision of public goods”, *Economic Journal* ; Alpizar, F., Carlsson, F. and Johansson-Stenman, O. (2008) “Anonymity, reciprocity, and conformity: Evidence from voluntary contributions to a national park in Costa Rica” *Journal of Public Economics*, 92 (5–6) pp 1047–1060

<sup>19</sup> This analysis of peer effects summarizes Smith, S., Windmeijer, F. and Wright, E. (2014) Peer effects in charitable giving: Evidence from the (running) field, *Economic Journal*.

<sup>20</sup> reference

across all pages). Minus numbers represent donations before the event (where the event is someone making the large donation or the small donation). “0” captures the large/small donation or the change in modal donation. Positive numbers represent donations after the event.

The figures powerfully demonstrate how donors respond to how much other people give. The donations that follow a single, large donation are significantly greater, on average, than the donations that came before. Further analysis shows that different-sized large donations (twice previous mean, three times previous mean, five times previous mean and more than ten times previous mean) trigger different-sized responses. The opposite effect occurs in the case of a small donation – the donations that come after a small donation are significantly smaller than the donations before it. The average donation size also moves up/down following an increase/decrease in the modal donation.

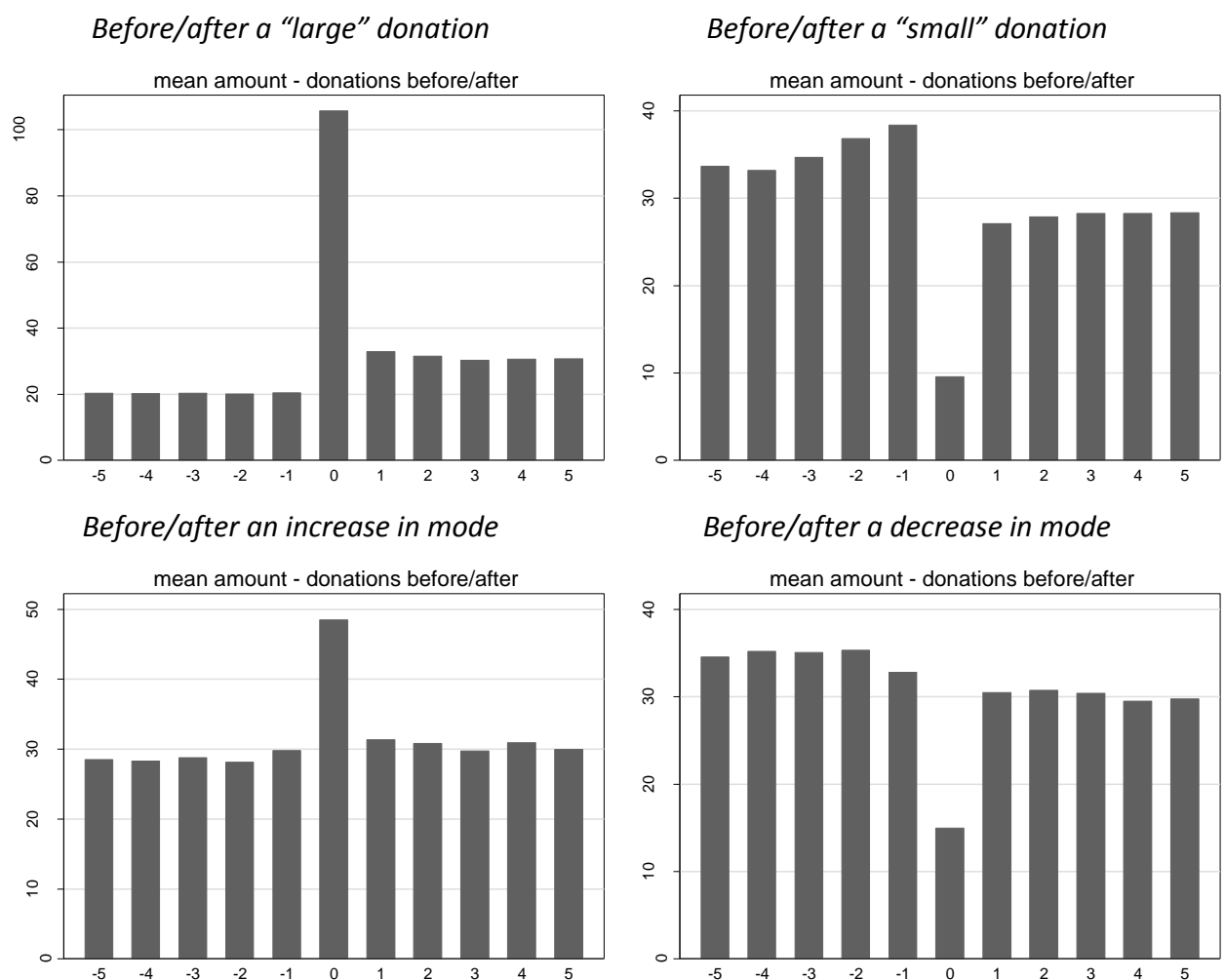
Further analysis shows that the effects appear to be fairly persistent affecting donation size for at least ten donations that follow. Partly this works through the fact that both large and small donations trigger other similar-sized donations (other large and small donations). But there are also long-term effects even on “regular-sized” donations. Our estimates imply that a single £100 donation results in a £10 increase in subsequent donations, this implies that it will “pay back” in ten donations’ time.

We find no adverse spillover effects from donors giving more in response to a large donation on one fundraising page to how much they give on other fundraising pages. There may be a concern that a large donation to one page crowds out donations to other pages. Exploiting the fact that, within the *JustGiving* sample, we can identify donors who give to more than one fundraising page, we confirm that there is a positive own-page effect but find that the estimated spillover effect on donations by the same donor to other fundraising page is actually positive, albeit insignificant.

Further analysis shows that the effects of donation amounts on subsequent donation size are equal for pages with and without a target and for large, established charities as well as newer, smaller ones (suggesting that large donations do not provide a signal of charity quality in this case). Our preferred explanation is benchmarking – donors want to position themselves at the appropriate place within the distribution of donations on a page, depending on factors such as their relationship to the fundraiser, their income and their support for the cause. Looking at

how much other people have given provides information on how much it is appropriate for to give. This is consistent with the observed pattern of behaviour, including donor responses to large and small donations as well as to changes in modal donations. It is also consistent with the fact that a single large/small donation has less effect if they occur later on in the page. The explanation for this is that it provides less additional information than if it comes earlier on the page. The intuition that fundraisers want a large donation early on their fundraising page is well supported by the data.

**Figure 3: Donors respond to how much other people have given**



Notes to figure:

Analysis based on sample of 10,597 fundraisers who ran in the 2010 London Marathon. On the x-axis: negative numbers donate the donations *before* the large/small donation/change in mode; positive numbers donate the donations *after*. A large donation is defined as twice the page mean and at least £50. A small donation is half the page mean. We focus on the first large/small donation or change in mode to occur on a page, excluding those within the first three donations.

We also find no evidence that such large donations might put people off donating altogether. We can't see whether people visit a fundraising page without giving, but we can measure the rate at which people arrive at a page and make a donation (the arrival rate, captured by number of donations per day) and we can test whether this is affected by a large/small donation. We find no evidence that large or small donations have any effect on the arrival rate.

## **Summary**

Analysing fundraising data provides insights into an important – and growing – source of income for many charities – and into motivations for charitable giving more generally.

Among the key insights are that:

Individual fundraising comes in different guises – from large-scale mass events to lone fundraisers doing a very personal challenge – and this nature of the event matters for how much people raise. People doing mass events tend to raise less individually, but are more likely to do more fundraising in the future. The fact that fundraisers doing the same event may have to compete for donations may be one explanation for the lower amounts raised, although more work is needed to test this further.

Targets seem to matter a lot. Pages with targets raise more than pages without and pages with high targets raise more than pages with low targets. There also seems to be an opportunity for fundraisers to use target-setting strategically to increase giving – by raising a target once it has been reached.

Individual fundraising introduces new social dynamics into fundraising (compared to traditional fundraising by charities). Most sponsors are part of the fundraiser's existing social network. Part of why they give is because they care about the fundraiser (and not just about the charity). They also look closely at what other donors give and use other people's donations to benchmark the amount that they give. Encouraging early, large donations really is a sure-fire way for a fundraiser to help increase their total.

## Appendix

The analysis in the paper is based on three samples of JustGiving data that were used for separate projects. We briefly describe each of the samples and provide comparative descriptive statistics.

### Large sample of JustGiving fundraisers

Our largest sample consists of 416,313 fundraisers who were active JustGiving users at the time of an online survey that ran from October 2010 – April 2011. This was based on a randomly selected sample from the wider population of all active JustGiving fundraisers. In our analysis we focus on the pages set up by these fundraisers in 2009 and 2010 (a total of 546,821 pages). We exclude any pages which received no donations.

|  | Mean | 10 <sup>th</sup><br>percentile | Median | 90 <sup>th</sup><br>percentile |
|--|------|--------------------------------|--------|--------------------------------|
| Number of donations                        | 21   | 3                              | 14     | 46                             |
| Amount raised                              | £566 | £38                            | £245   | £1,343                         |
| Sample: 416,313 fundraisers; 546,821 pages |      |                                |        |                                |

### London Marathon Fundraising data

Our initial sample contained information from more than 12,000 fundraising pages. The data were captured on 30<sup>th</sup> April 2010, five days after the marathon took place. The table below provides a basic sample summary. Note that we exclude pages which have single donations of more than £1,000. We also exclude pages with fewer than ten donations (1,783 pages) or more than 100 donations (212 pages). With these exclusions, our sample is 10,597 pages.

|                      | Mean   | 10 <sup>th</sup><br>percentile | Median | 90 <sup>th</sup><br>percentile |
|----------------------|--------|--------------------------------|--------|--------------------------------|
| Number of donations  | 37     |                                | 33     |                                |
| Amount raised        | £1,115 |                                | £892   |                                |
| Sample: 10,597 pages |        |                                |        |                                |

### Facebook fundraisers

Our sample for analysis comprises 566,240 donations made to 39,238 pages where the fundraiser linked their fundraising page to their Facebook page. This is after some cleaning. We remove 3,817 pages where we cannot identify the charity registration number for England and Wales. We also drop 30 pages with zero friends and 364 with zero amounts donated. We remove outliers, including pages with individual donations of £170+ (top 1%), pages which raised £3,241+ (top 1%) and pages with fundraising targets of £100,000 or more (37 pages).

|                                  | Mean   | 10 <sup>th</sup><br>percentile | Median | 90 <sup>th</sup><br>percentile |
|----------------------------------|--------|--------------------------------|--------|--------------------------------|
| Number of donations              | 14.5   |                                | 9      |                                |
| Amount raised                    | £347.4 |                                | £134   |                                |
| Sample: 39,238 fundraising pages |        |                                |        |                                |